



MARYLAND Department of Health

Larry Hogan, Governor · Boyd Rutherford, Lt. Governor · Dennis Schrader, Secretary

November 17, 2017

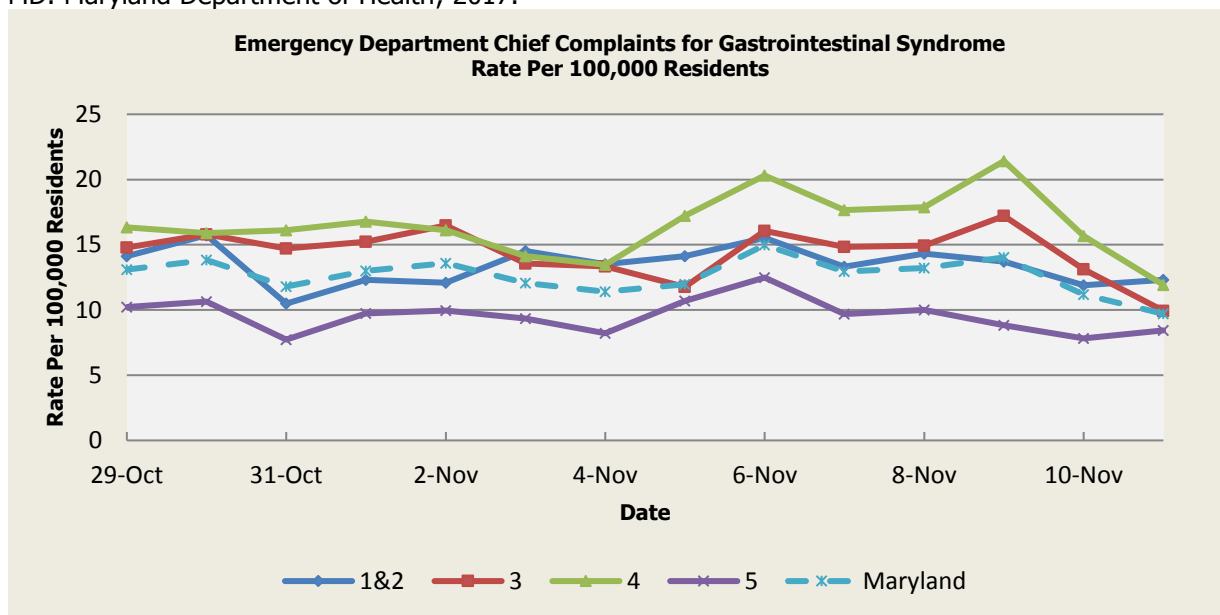
Public Health Preparedness and Situational Awareness Report: #2017:45 Reporting for the week ending 11/11/17 (MMWR Week #45)

CURRENT HOMELAND SECURITY THREAT LEVELS

National: No Active Alerts
Maryland: Normal (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

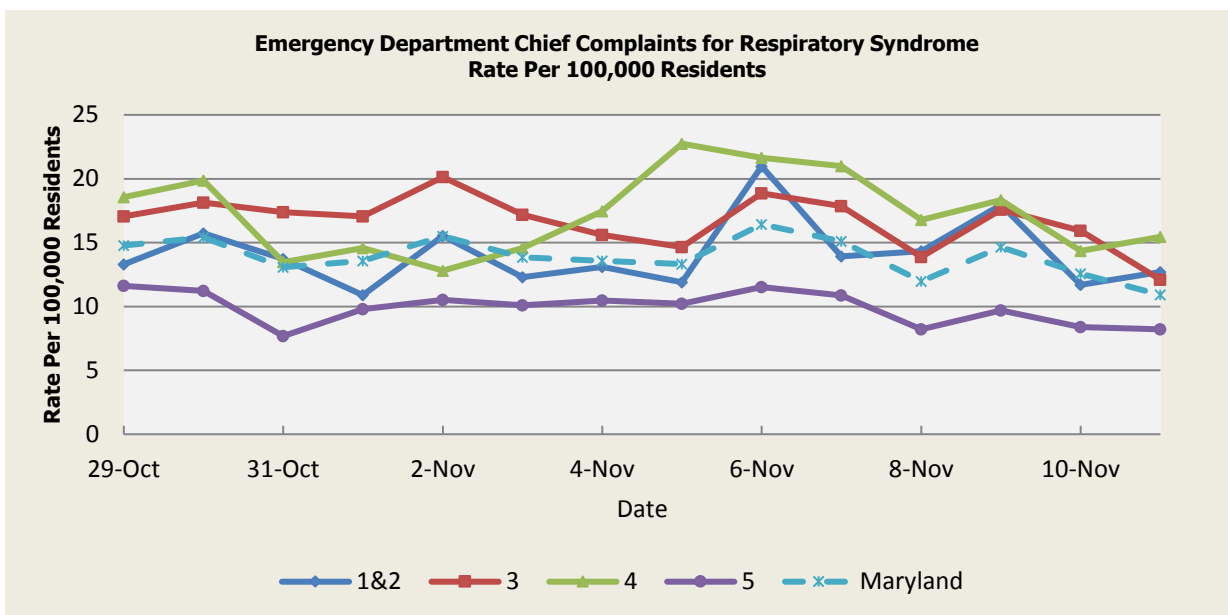
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics): Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health; 2017.



There were three (3) Gastrointestinal Syndrome outbreaks reported this week: one (1) outbreak of Gastroenteritis associated with a Daycare Center (Region 3); two (2) outbreaks of Gastroenteritis/Foodborne associated with Restaurants (Regions 3,4).

Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.03	14.08	14.38	9.60	12.21
Median Rate*	12.91	14.80	15.02	10.22	12.95

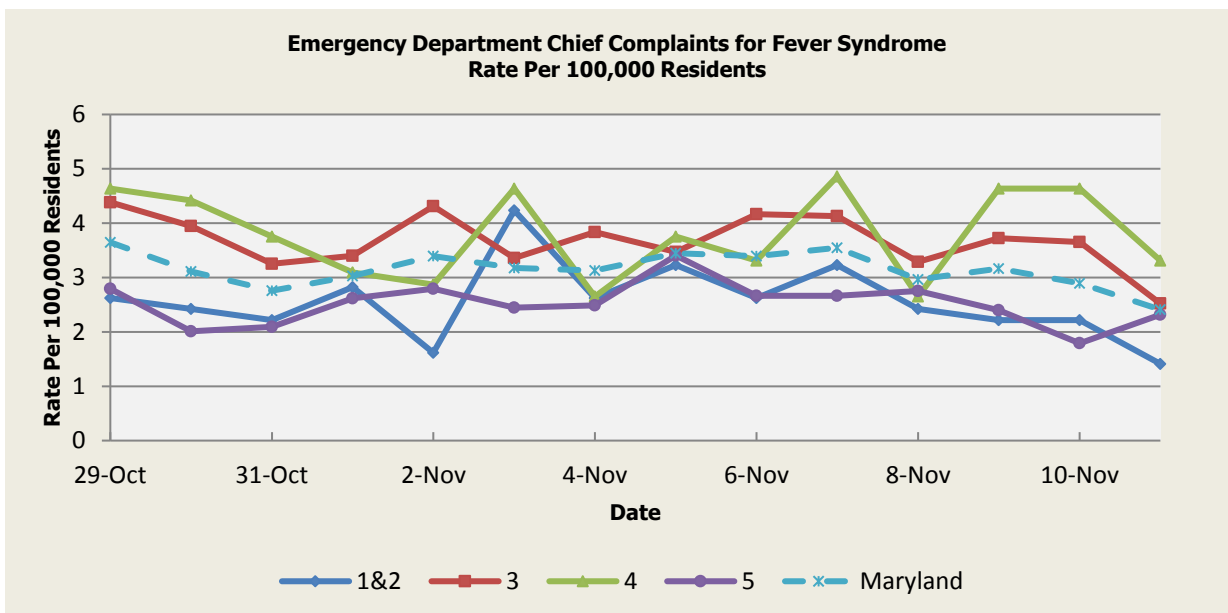
* Per 100,000 Residents



There was one (1) Respiratory Syndrome outbreak reported this week: one (1) outbreak of Pneumonia in a Nursing Home (Region 3).

Respiratory Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	11.23	13.47	13.37	9.28	11.67
Median Rate*	11.70	13.88	13.91	9.65	12.05

* Per 100,000 Residents

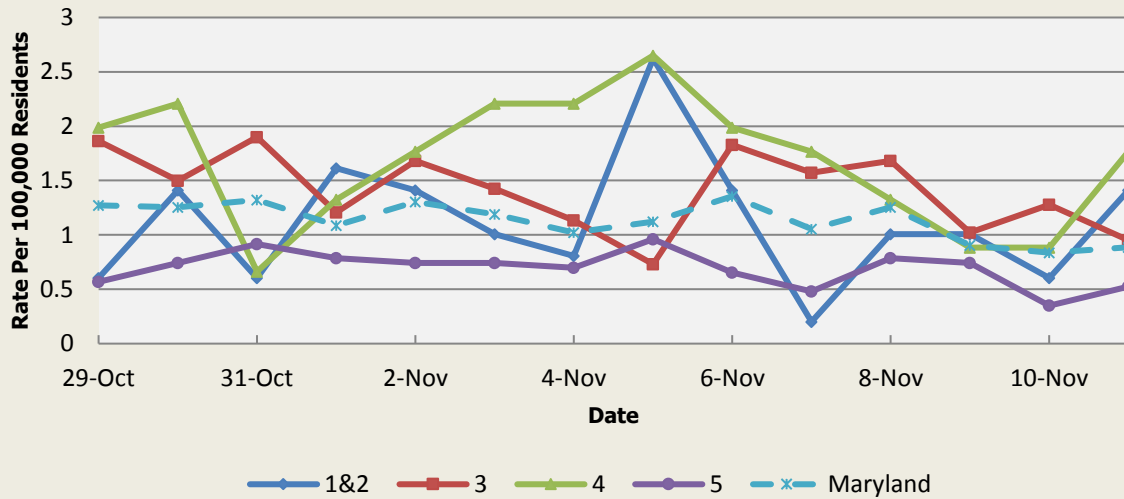


There were no Fever Syndrome outbreaks reported this week.

Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	2.82	3.61	3.71	2.87	3.27
Median Rate*	2.82	3.76	3.75	2.97	3.40

Per 100,000 Residents

Emergency Department Chief Complaints for Localized Lesion Syndrome Rate Per 100,000 Residents



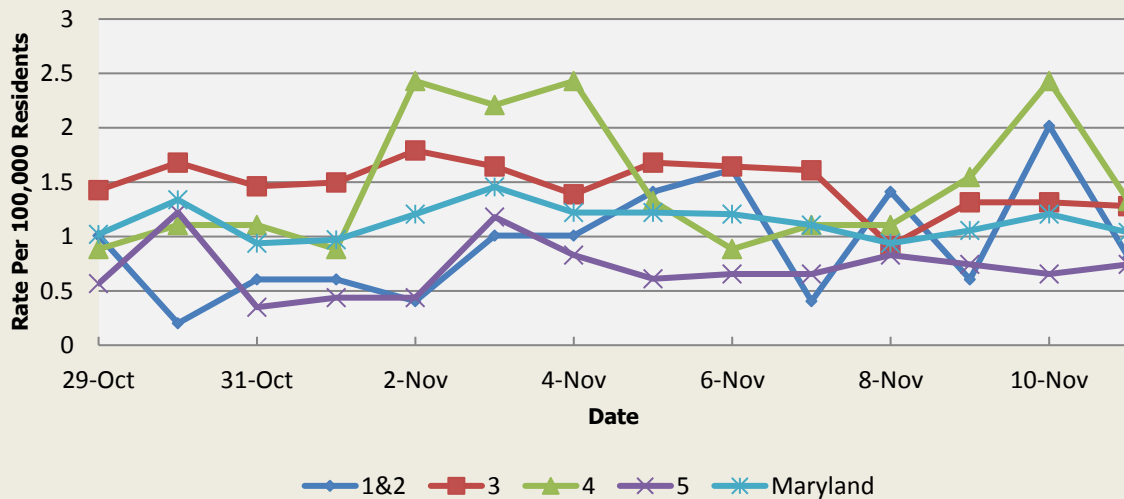
There were no Localized Lesion Syndrome outbreaks reported this week.

Localized Lesion Syndrome Baseline Data January 1, 2010 - Present

Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.97	1.76	1.89	0.89	1.37
Median Rate*	1.01	1.83	1.99	0.92	1.42

* Per 100,000 Residents

Emergency Department Chief Complaints for Rash Syndrome Rate Per 100,000 Residents

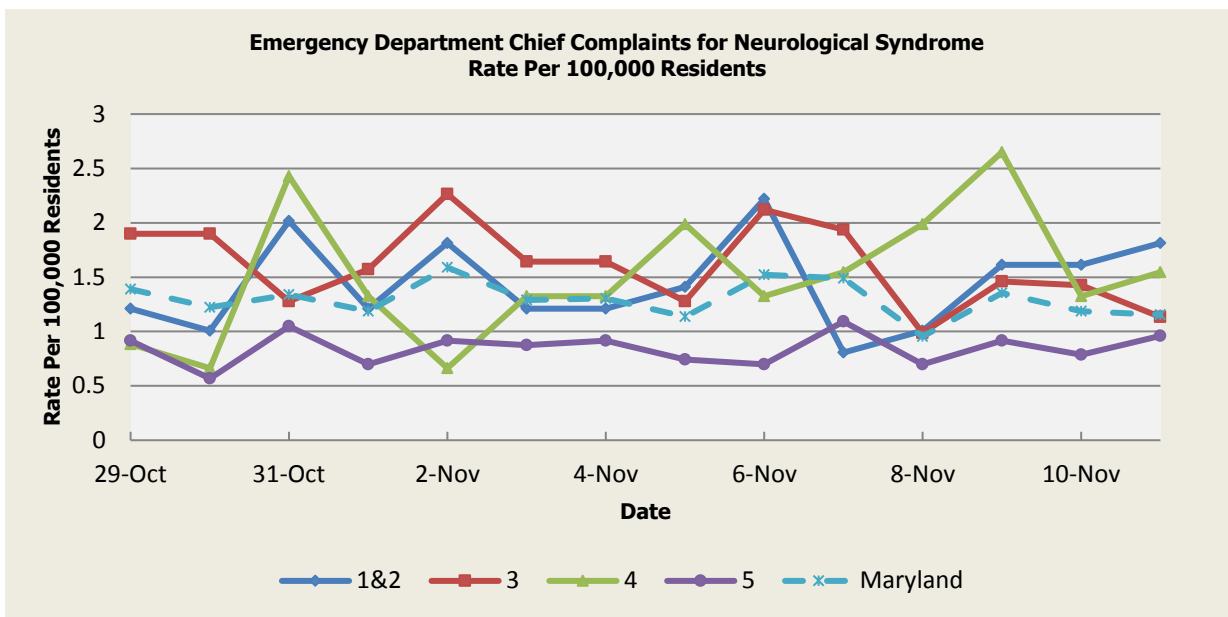


There were three (3) Rash Syndrome outbreaks reported this week: one (1) outbreak of Chickenpox associated with a Daycare Center (Region 5); one (1) outbreak of Scabies in an Assisted Living Facility (Region 4); one (1) outbreak of Hand, Foot, and Mouth Disease associated with a Daycare Center (Region 5).

Rash Syndrome Baseline Data January 1, 2010 - Present

Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.16	1.63	1.65	0.96	1.34
Median Rate*	1.21	1.68	1.77	1.00	1.39

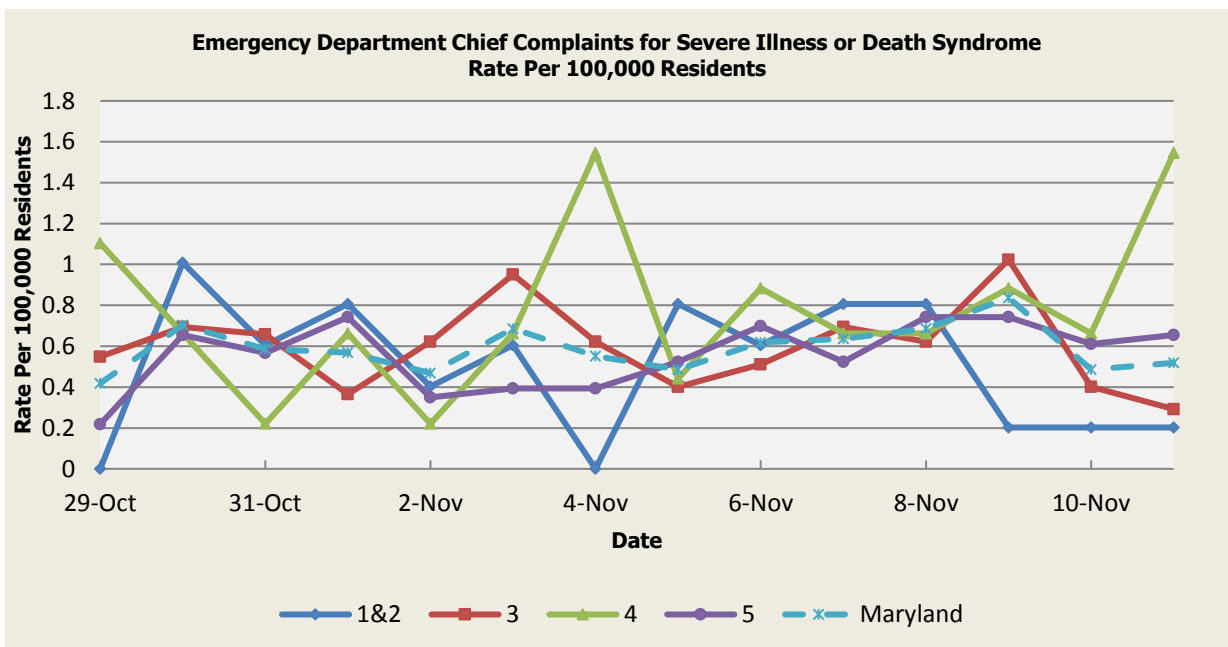
* Per 100,000 Residents



There were no Neurological Syndrome outbreaks reported this week.

Neurological Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.61	0.74	0.64	0.47	0.62
Median Rate*	0.60	0.69	0.66	0.48	0.59

* Per 100,000 Residents

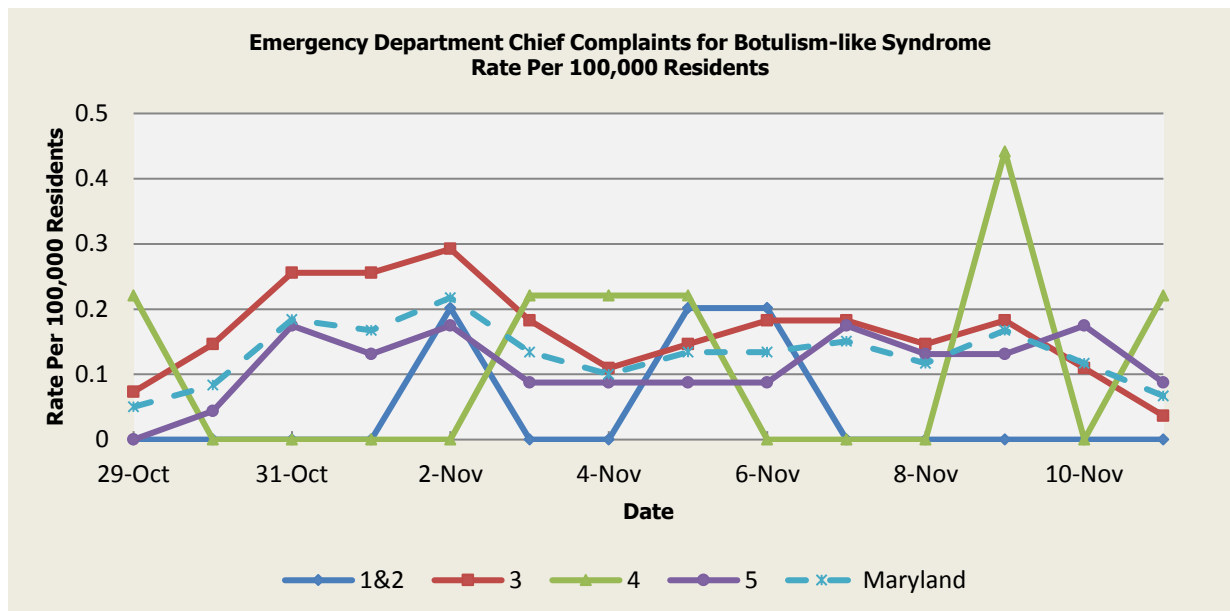


There were no Severe Illness or Death Syndrome outbreaks reported this week.

Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.60	0.86	0.75	0.43	0.66
Median Rate*	0.60	0.91	0.66	0.44	0.70

* Per 100,000 Residents

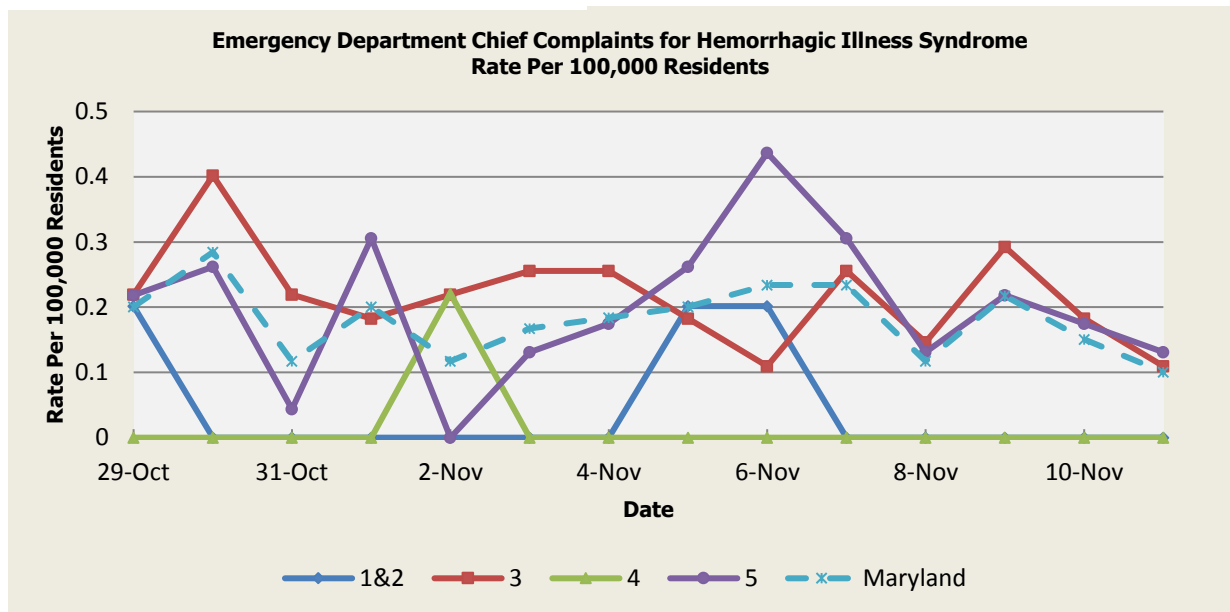
SYNDROMES RELATED TO CATEGORY A AGENTS



There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 10/29 (Region 4), 10/31 (Regions 3,5), 11/01 (Regions 3,5), 11/02 (Regions 1&2,3,5), 11/03 (Regions 3,4), 11/04 (Region 4), 11/05 (Regions 1&2,4), 11/06 (Regions 1&2,3), 11/07 (Regions 3,5), 11/08 (Region 5), 11/09 (Regions 3,4,5) 11/10 (Region 5), 11/11 (Region 4). These increases are not known to be associated with any outbreaks.

Botulism-like Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.06	0.09	0.04	0.05	0.07
Median Rate*	0.00	0.07	0.00	0.04	0.05

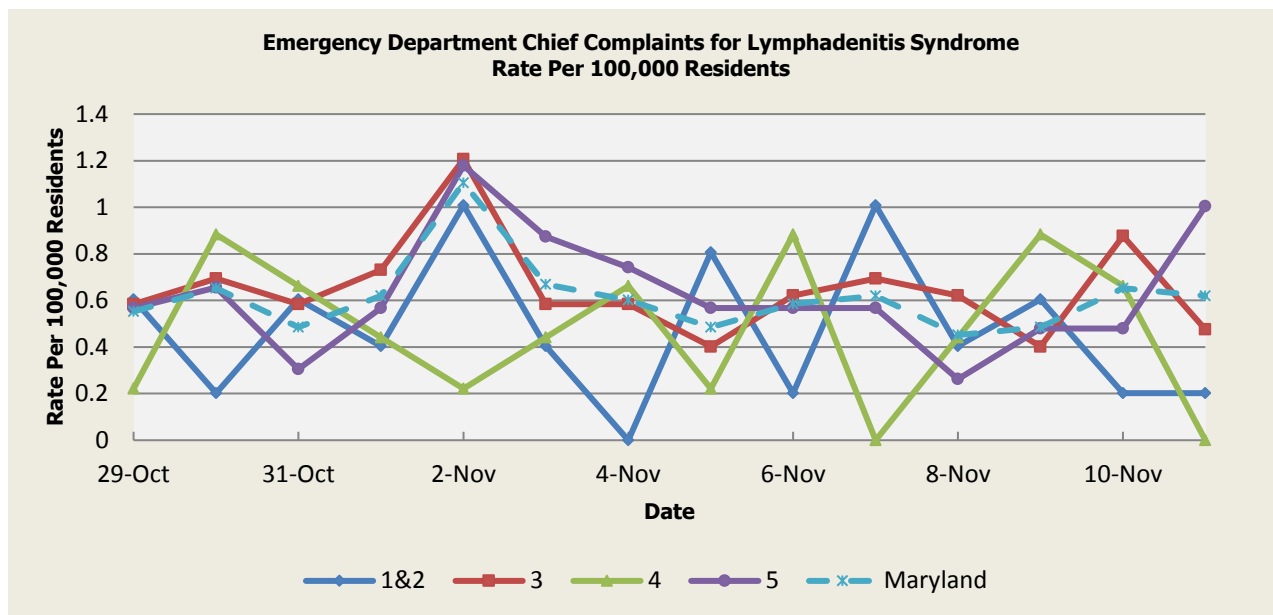
* Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 10/29 (Regions 1&2,5), 10/30 (Regions 3,5), 11/01 (Region 5), 11/02 (Region 4), 11/03 (Region 3), 11/04 (Region 3), 11/05 (Regions 1&2,5), 11/06 (Regions 1&2,5), 11/07 (Regions 3,5), 11/09 (Regions 3,5). These increases are not known to be associated with any outbreaks.

Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.03	0.12	0.03	0.09	0.09
Median Rate*	0.00	0.04	0.00	0.04	0.05

* Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 10/29 (Regions 1&2), 10/30 (Regions 4,5), 10/31 (Regions 1&2), 11/02 (Regions 1&2,3,5), 11/03 (Region 5), 11/04 (Regions 4,5), 11/05 (Regions 1&2), 11/06 (Region 4), 11/07 (Regions 1&2), 11/09 (Regions 1&2,4), 11/10 (Region 4), 11/11 (Region 5). These increases are not known to be associated with any outbreaks.

Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.29	0.49	0.32	0.30	0.39
Median Rate*	0.20	0.40	0.22	0.26	0.33

* Per 100,000 Residents

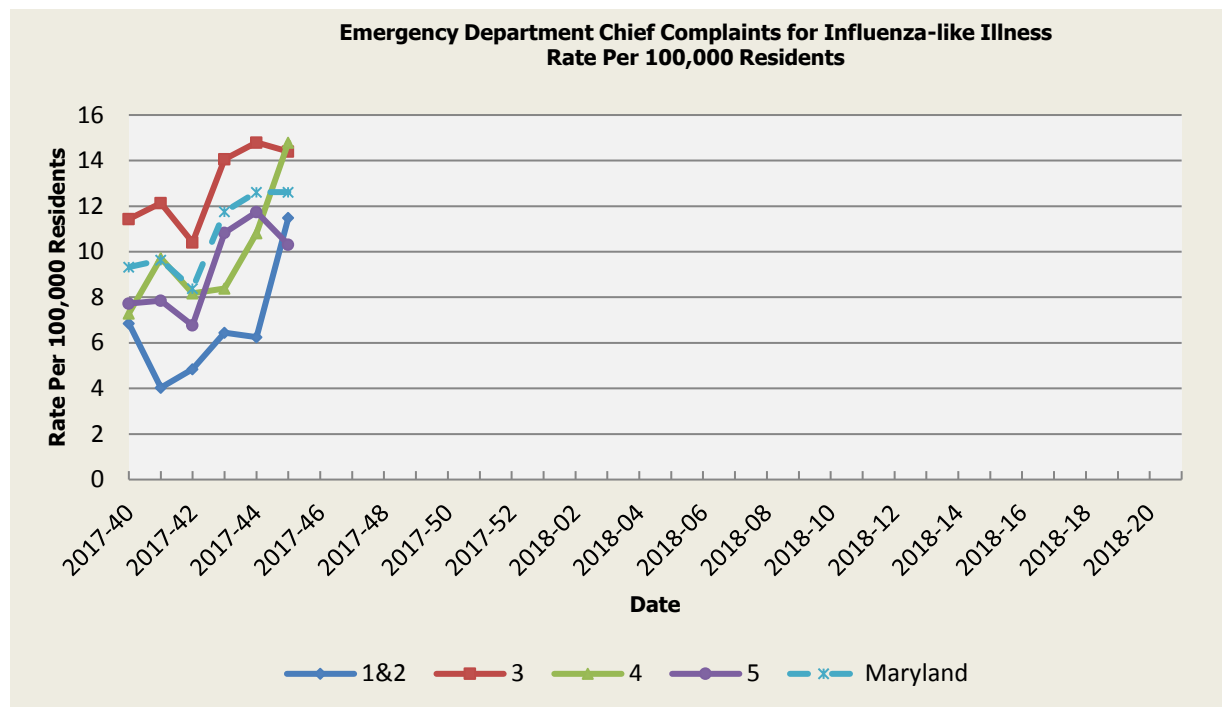
MARYLAND REPORTABLE DISEASE SURVEILLANCE

Condition	Counts of Reported Cases†					
	November			Cumulative (Year to Date)**		
Vaccine-Preventable Diseases	2017	Mean*	Median*	2017	Mean*	Median*
Meningococcal disease	1	0	0	6	4.4	4
Measles	0	0.4	0	4	5.2	4
Mumps	0	0.4	0	23	42.8	21
Rubella	0	0.4	0	1	5.4	5
Pertussis	2	19.8	20	191	314.2	333
Foodborne Diseases	2017	Mean*	Median*	2017	Mean*	Median*
Salmonellosis	12	25	21	796	866.4	874
Shigellosis	1	5.2	6	220	187	213
Campylobacteriosis	11	19.6	21	746	693.8	693
Shiga toxin-producing Escherichia coli (STEC)	3	4	3	176	139.6	130
Listeriosis	0	0.6	0	25	16	16
Arboviral Diseases	2017	Mean*	Median*	2017	Mean*	Median*
West Nile Fever	0	0.2	0	4	14.4	13
Lyme Disease	52	84	84	3121	2854.8	2651
Emerging Infectious Diseases	2017	Mean*	Median*	2017	Mean*	Median*
Chikungunya	0	1	0	0	9.4	0
Dengue Fever	2	0.4	0	22	26.8	19
Zika Virus***	0	0.6	0	3	17.8	7
Other	2017	Mean*	Median*	2017	Mean*	Median*
Legionellosis	3	4.4	5	215	165.6	169
Aseptic meningitis	12	15.8	16	379	418	428

NEDSS data: Maryland National Electronic Disease Surveillance System (NEDSS). Baltimore, MD: Maryland Department of Health; 2017. † Counts are subject to change *Timeframe of 2011-2017**Includes January through current month. *** As of November 17, 2017, the total [Maryland Confirmed and Probable Cases of Zika Virus Disease and Infection](#) for 2017 is 62.

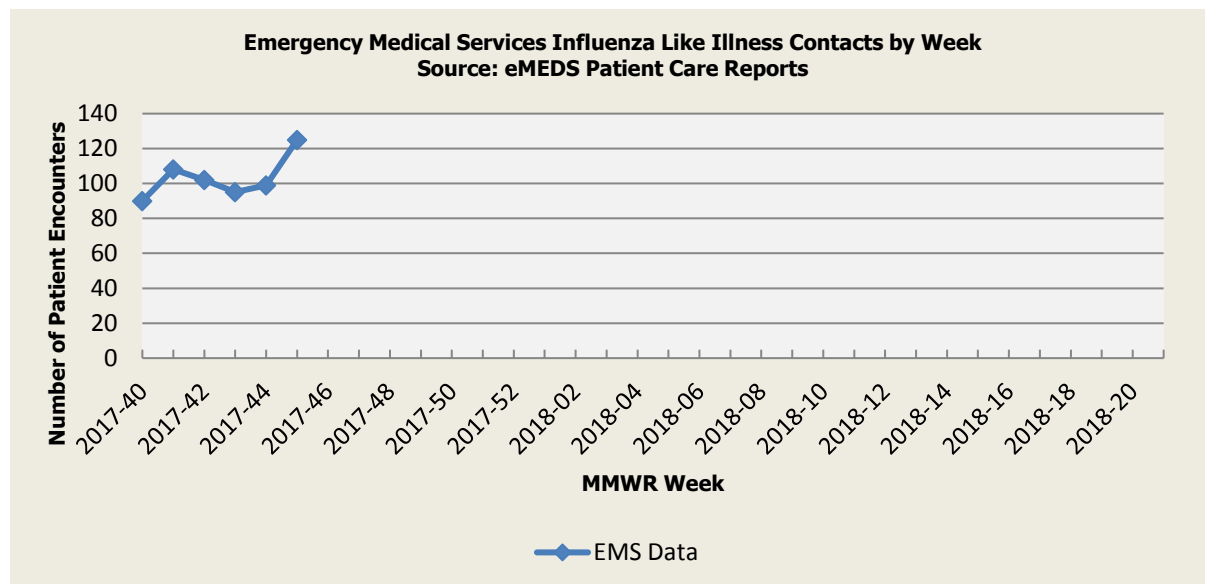
SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October through May). Seasonal Influenza activity for Week 45 was: Local Geographic Spread with Minimal Intensity.



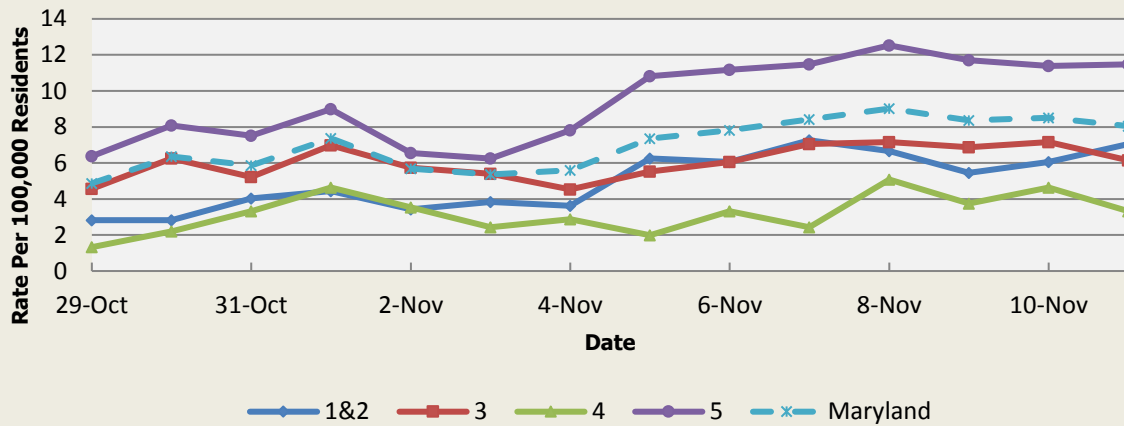
Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	9.65	12.89	11.82	11.17	11.88
Median Rate*	7.66	9.63	9.05	8.51	9.00

* Per 100,000 Residents



Disclaimer on eMEDS flu related data: These data are based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. These data are reported for trending purposes only.

Over-the-Counter Medication Sales Related to Influenza Rate Per 100,000 Residents

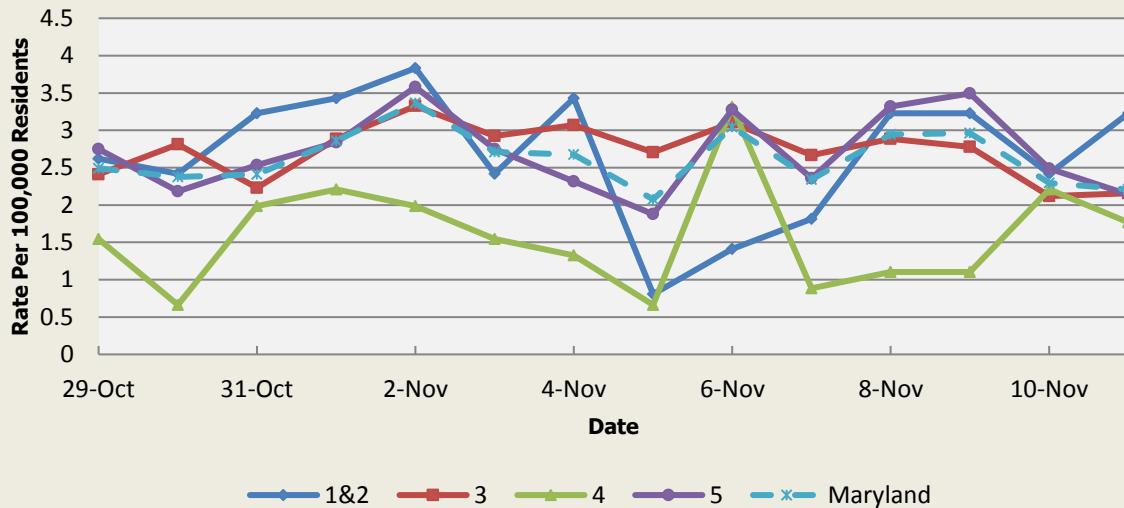


There was not an appreciable increase above baseline in the rate of OTC medication sales during this reporting period.

OTC Medication Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.51	4.57	2.54	7.87	5.60
Median Rate*	3.23	4.38	2.43	8.03	5.52

* Per 100,000 Residents

Over-the-Counter Thermometer Sales Rate Per 100,000 Residents



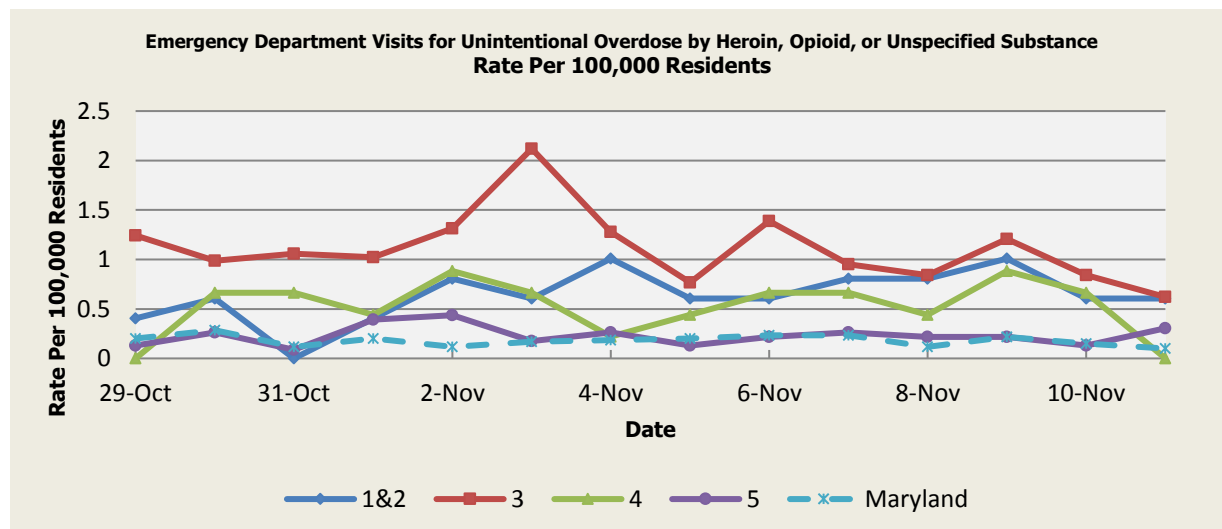
There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

Thermometer Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.14	3.01	2.33	4.03	3.36
Median Rate*	3.02	3.03	2.43	4.06	3.36

* Per 100,000 Residents

SYNDROMIC OVERDOSE SURVEILLANCE

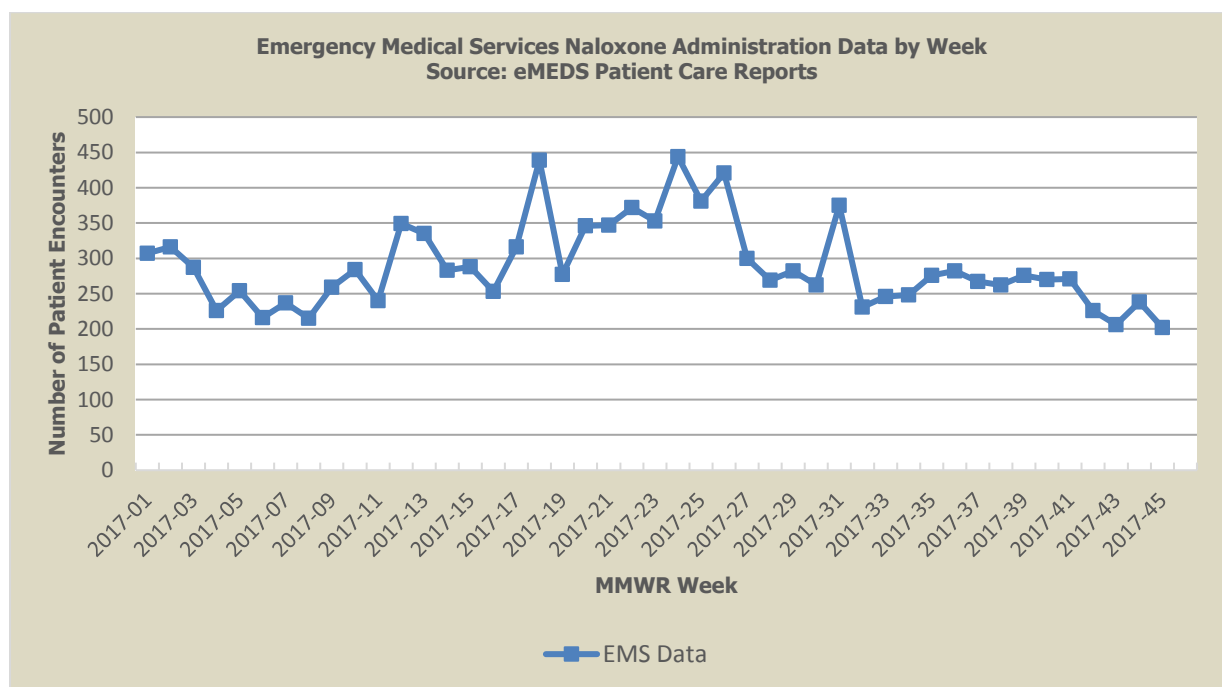
The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that most fatal overdoses are Opioid-related.



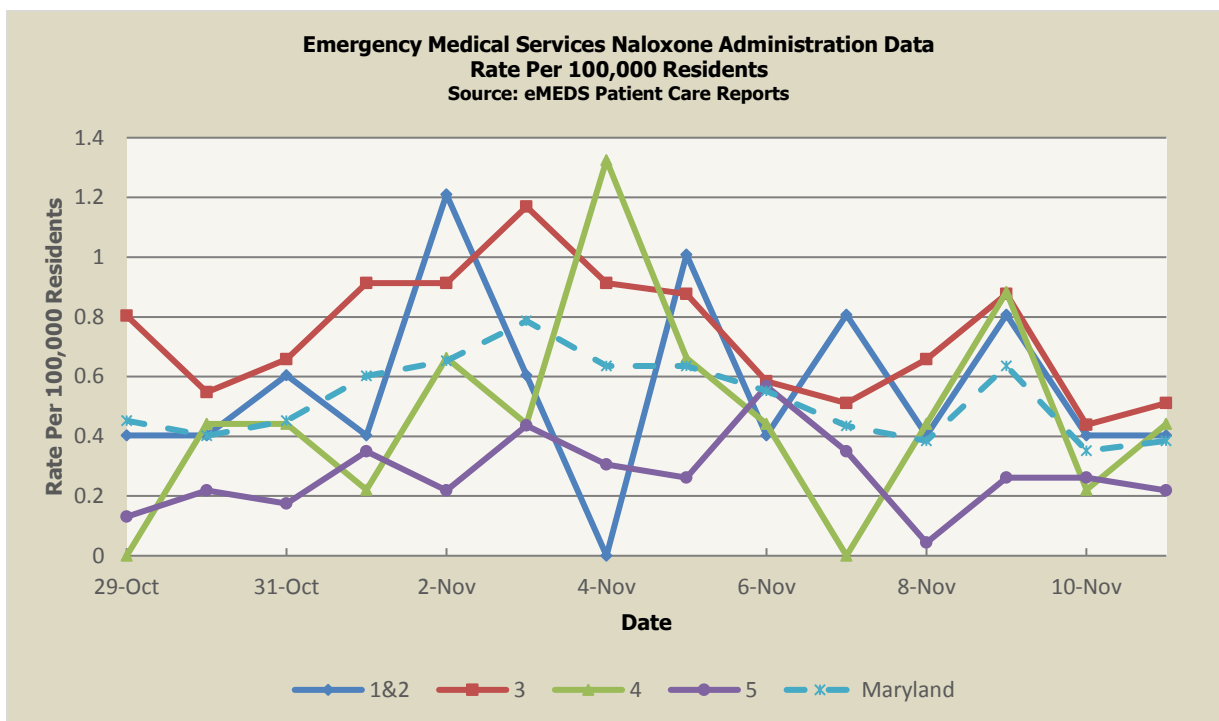
Disclaimer on ESSENCE Overdose related data: ESSENCE chief complaint and discharge diagnosis query for overdose-related illness includes but is not limited to the following terms: heroin, opioid, speedball, dope, fentanyl, naloxone, narcan, and overdose.

Non-fatal Overdose ED Visit Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.30	0.39	0.35	0.14	0.28
Median Rate*	1.01	1.32	1.10	0.48	0.99

* Per 100,000 Residents



Disclaimer on eMEDS naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.



Disclaimer on eMEDS Naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

EMS Naloxone Administration Data Baseline Data January 1, 2017 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.30	0.39	0.35	0.14	0.28
Median Rate*	1.01	1.32	1.10	0.48	0.99

* Per 100,000 Residents

PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. Presently, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national, and global levels are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of October 30, 2017, the WHO-confirmed global total (2003-2017) of human cases of H5N1 avian influenza virus infection stands at 860, of which 454 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

AVIAN INFLUENZA

HPAI H5N6 (JAPAN), 12 Nov 2017, Highly pathogenic influenza A viruses (infection with) (non-poultry including wild birds), Japan. Read More: <http://www.promedmail.org/post/5439136>

HUMAN AVIAN INFLUENZA

There were no cases of human avian influenza reported this week.

NATIONAL DISEASE REPORTS

LEGIONELLOSIS (NEW YORK), 11 Nov 2017, The Hebrew Home at Riverdale has implemented more stringent water restrictions and testing after 5 residents contracted Legionnaires' disease. All 5 have recovered, according to Hebrew Home officials, and none required hospitalization. Read More: <http://www.promedmail.org/post/5438086>

E. coli EHEC (CALIFORNIA), 11 Nov 2017, No source has been determined in the _E. coli_ outbreak that has sickened dozens of U.S. Marine recruits in San Diego. Ten new cases have been reported, according to officials at Marine Corps Recruit Depot San Diego. Read More: <http://www.promedmail.org/post/5436982>

LEGIONELLOSIS (CALIFORNIA), 11 Nov 2017, Disneyland has shut down 2 bacteria-contaminated cooling towers after Orange County health officials discovered several cases of Legionnaires' disease in people who had visited the Anaheim theme park, authorities said. The 12 cases of the bacteria-caused illness were discovered about 3 weeks ago among people who had spent time in Anaheim and included 9 people who had visited Disneyland Park in September before developing the illness. Read More: <http://www.promedmail.org/post/5438167>

HEPATITIS A (MULTI-STATE) 12 Nov 2017, Since the beginning of the outbreak in August 2016, public health response has included increased healthcare awareness efforts, public notification and education, and outreach with vaccination clinics for high-risk populations. No common sources of food, beverages, or drugs have been identified as a potential source of infection. Transmission appears to be through direct person-to-person spread and illicit drug use. Read More: <http://www.promedmail.org/post/5439275>

MUMPS (MULTI-STATE) 15 Nov 2017, After one student at Syracuse University [New York] contracted the mumps in late August [2017], the virus has since spread to more than 76 cases, with the confirmation that 37 students currently have the virus, causing a health epidemic on Syracuse's campus. Read More: <http://www.promedmail.org/post/5444251>

INTERNATIONAL DISEASE REPORTS

HANTAVIRUS (ARGENTINA), 10 Nov 2017, There is confirmation of 2 cases of hantavirus in students in the Hugo Luna School in Oran, Salta. These involve 2 girls who were hospitalized with symptoms of the virus [infection] and so the school was closed for a cleanup and classes were suspended. Read More: <http://www.promedmail.org/post/5436030>

EQUINE INFECTIOUS ANEMIA (CANADA), 11 Nov 2017, There has been one confirmed case in Red Deer County this year [2017], with other confirmed cases in Beaver County and the County of Two Hills. Read More: <http://www.promedmail.org/post/5437314>

Q FEVER (CHILE), 11 Nov 2017, The infections reached 47 people, 20 of them required hospitalization due to the severity of the symptoms, 3 of them even required connection to mechanical ventilation. The situation has worsened, and infections have risen to 56, according to the Assistant Sub-Secretary of Public Health, Cristian Herrera. Read More: <http://www.promedmail.org/post/5438140>

PLAGUE (MADAGASCAR), 11 Nov 2017, The epidemic of plague is still being talked about in the city of Antananarivo. A man reportedly entered a large hospital in Antananarivo with pulmonary plague, according to the result of a rapid diagnostic test (RDT). Read More: <http://www.promedmail.org/post/5438233>

LEPROSPIROSIS (TRINIDAD), 11 Nov 2017, According to media reports, 13 cases of leptospirosis were reported at the San Fernando General Hospital. It is thought the cases connected to unhygienic conditions due to recent flooding in parts of South Trinidad. Read More: <http://www.promedmail.org/post/5438234>

VARICELLA (BHUTAN), 11 Nov 2017, The Ministry of Health in Mambwe district in Eastern Province have recorded an increase in cases of Chicken Pox [Varicella] from 80 -- 349 [cases] in the 3rd quarter. Read More: <http://www.promedmail.org/post/5438313>

MONKEYPOX (NIGERIA), 12 Nov 2017, The dreaded monkey pox virus has continued to spread in Delta state, with the state government on Wed 8 Nov 2017 confirming one case of the virus among the 5 suspected cases that were earlier reported. Read More: <http://www.promedmail.org/post/5439201>

CRIMEAN-CONGO HEM. FEVER (INDIA), 12 Nov 2017, A 39-year-old resident of Khedbrahma taluka in Sabarkantha district, was tested positive for Congo fever. Top sources in the civic body-run hospital confirmed that the resident had been tested positive for Congo fever. Read More: <http://www.promedmail.org/post/5439276>

MERS- CoV (SAUDI ARABIA), 13 Nov 2017, 1740 laboratory-confirmed cases of MERS-CoV infection, including 703 deaths [reported case fatality rate 40.4 percent], 1016 recoveries, and 21 currently active cases/infections. Read More: <http://www.promedmail.org/post/5441815>

JAPANESE ENCEPHALITIS (INDIA), 13 Nov 2017, Japanese encephalitis has made its way to Rajasthan with the death of a woman. This is the 1st case of Japanese encephalitis in the state. The 30-year-old woman, from Bundi, died last month [October 2017]. Now, the National Institute of Virology (NIV), Pune in its report has confirmed that she was suffering from Japanese encephalitis. Read More: <http://www.promedmail.org/post/5441846>

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.health.maryland.gov/> or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the MDH website:
<http://phpa.health.maryland.gov/influenza/fluwatch/Pages/Home.aspx>

Please participate in the Maryland Resident Influenza Tracking System (MRITS): <http://flusurvey.health.maryland.gov>

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

Prepared By:

Office of Preparedness and Response, Maryland Department of Health
300 W. Preston Street, Suite 202, Baltimore, MD 21201
Fax: 410-333-5000

Adejare (Jay) Atanda, DDS, MPH, CPH
Biosurveillance Epidemiologist
Office: 410-767-5668
Email: Adejare.Atanda@maryland.gov

Jessica Goodell, MPH
Temporary Epidemiology Field Assignee, CDC
Office: 410-767-6745
Email: Jessica.Goodell@maryland.gov

Kamilla Keldiyarova
Intern
Office of Preparedness and Response
Email: Kamilla.Keldiyarova@maryland.gov

Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE
Regions 1 & 2	Allegany County Frederick County Garrett County Washington County
Region 3	Anne Arundel County Baltimore City Baltimore County Carroll County Harford County Howard County
Region 4	Caroline County Cecil County Dorchester County Kent County Queen Anne's County Somerset County Talbot County Wicomico County Worcester County
Region 5	Calvert County Charles County Montgomery County Prince George's County St. Mary's County

